

Rockpanel Structure is a very durable panel with a lightly textured finish, specially developed for use in cladding, fascia, soffit applications. The basic panel consists of high quality mineral rock fibres which are compressed with a minimal quantity of organic binder. This produces a very light weight panel which can be easily worked on site. The panels are dimensionally stable and are unaffected by changes of humidity or temperature differences.

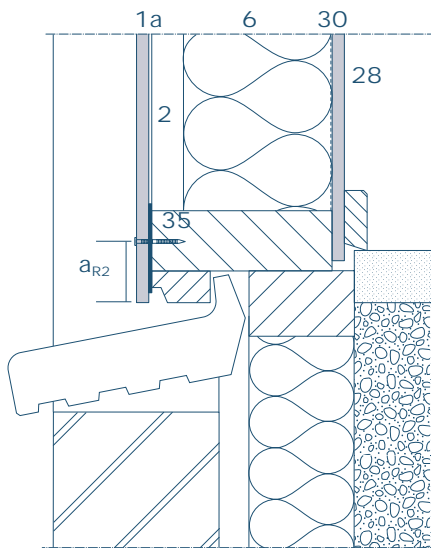


ROCKPANEL STRUCTURE	DURABLE			
Panel width in mm	1200			
Panel thickness	6		8	
Panel dimensions	2500	3050	2500	3050
Thickness tolerance	+0,5/-0,5			
Length/width tolerance	+2/-2			
Diagonal tolerance	≤ 4			
Nominal volumetric mass kg/m ³	1050 + 150/-150			
Nominal mass of surface kg/m ²	6,3		8,4	
Option: - Non standard boardsizes	> 600 m ²			

DURABLE: Rockpanel panels for general applications.

Coating

Rockpanel Structure panels are finished with a water based coating giving the effect of a lightly textured finish in a longitudinal direction across the panel. The panel is vapour permeable allowing it to be used in a non-ventilated application. Consult the Design conditions for unventilated structures in the Technical Design Guide and the BBA approval.



Detail 1-551

- 1a Rockpanel panel 6 or 8 mm thick
(Rockpanel Structure vapour-permeable)
- 2 Joint gasket
- 6 Rockwool Insulation
- 28 Internal lining
- 30 Vapour barrier, pe-film, at least 0.15 mm thick
- 35 Surface fix fastener
- a_{R2} Fixing distance at least 50 mm

Mechanical Fixing system

Rockpanel has developed special mechanical fixing systems for use on timber structures utilising the properties of the panel.

The Rockpanel stainless steel ring shank nails can be applied both manually or with an easily adjustable, pneumatic nail gun. This method has the advantage of speed of application and with the small nail heads it offers practically invisible fixing on the panel surface.

The Rockpanel stainless steel Torx head screws with torx thread have a small pre-coated head ensuring a low profile surface fix appearance without the need for washers or cover caps. Both the torx screws and ring shank nails are AISI 316 grade Stainless Steel and so can be used in Chlorine rich environments and coastline zones. For fixing Rockpanel panels onto aluminium rail systems an aluminium rivet as specified under the

Rockpanel Accessories with a flat head can be used. When fixing to aluminium rail systems the expansion of the aluminium needs to be taken into consideration. Consult also the Technical Design Guide for this. When fixing to certain types of metal rail systems a self drilling, self tapping torx screw can be used, details can be obtained from Rockpanel's Technical design Guide.

Adhesive Fixing system

Rockpanel Tack is a very durable secret fix adhesive system for Rockpanel facade applications. The system consists of primers, self adhesive foam tape and high elasticity solvent free MS polymer based adhesive. For application procedure please refer to the product data-sheets available from Rockpanel.

Ventilating background structures

For ventilated facades it is recommended that the cavity depth be at least 28 mm.

If Rockpanel Structure is used in an unventilated structure, consult the "Design conditions for unventilated structures" and the BBA approval.

Colour fastness/UV-resistance

The colour fastness of various colours is determined in a Xenotest 1200 U artificial weathering apparatus. After 3000 hours of exposure to UV light and periodic rain, the changes in colours are determined in accordance with EN 20105-A02 and -A03.

The results expressed in grey scale are:

- for the colours "white" and "cream" at least class 3-4

Physical properties

Dimensional stability length/width EN 438-2:

Dimensional stability (m/m°C) $11 \cdot 10^{-6}$

Dimensional stability per 10% change RH (m/m) $8 \cdot 10^{-5}$

Water uptake via the sawn edge after 28 days:

at 20°C and 65% RH: < 2%

at 2°C and 90% RH: < 0,2%

Fire properties

In case the product is completely tested a classification of B-s1-d0 on a aluminium support construction and B-s2-d0 on a wooden support construction is expected according EN-13501-1.

Mechanical properties

Characteristic bending tensile strength in N/mm²

EN 310 and EN 1058 :f₀₅ ≥ 27

Elasticity module bending, after statistic

N/mm² EN 310, E₀₅ 3380

Workability

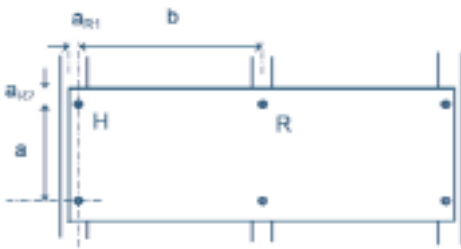
Rockpanel Structure can easily be sawn with tools with a 300 mm Ø 48 width tooth circular saw. For sawing recesses of contours a jigsaw with a toothed blade with tungsten particles can be used (e.g. Bosch type T150 RIFF or AEG type K50:932-213232).

Storage

Store the panels dry on a flat pallet.
Do not place more than 2 pallets on top of each other.

Rockpanel accessories

- Ring shank nails: Rockpanel stainless steel AISI 316 ring shank nails 32 mm long
- Screws: Rockpanel stainless steel AISI 316 torx screws 35 mm long
- Rivets: Aluminium rivets with painted head as specified in the BBA approval
- Joint gasket:
 - PVC gasket with low groove
 - width 36 mm:
 - width 60 mm
 - EPDM self-adhesive foam gasket
 - width 36 mm:
 - width 60 mm
- Edge treatment: No treatment is required for the panel edges, after 6 weeks the edge will naturally go Dark brown in sunlight
- Edge paint: Rockpanel edge paint can be used
- Adhesive: Rockpanel Tack with double-sided adhesive foam strip and primers for wood and aluminium



	Designloads - permissible pullover strength in N / position of the fixing							
	Fixing, a_{R1} is the panel edge distance on the timber batten							
	Max. corner to corner of fixings mm		M: middle of the panel		R: edge of the panel $a_{R1} = 15 \text{ mm}$		H: panel corner $a_{R1}/a_{R2} = 15/50 \text{ mm}$	
Panel thickness	6 (a-b)	8 (a-b)	6	8	6	8	6	8
Adhesive [a]	n/a 400	n/a 600	1 N/mm ²					
Ring shank nail	300-400	400-600	155	190	100	190	85	130
Screw	300-400	600-600	230	330	125	180	75	85
Rivet	300-400	600-600	255	435	150	230	100	115

[a] : Rockpanel Tack

[UK] : Designloads including a safety factor of 3

Colours

Rockpanel Structure is available as standard in 6 RAL-colours:

The RAL colours slightly differ from the referring RAL colours.

RAL 7005 Mouse Grey
RAL 7024 Graphite Grey
RAL 7035 Light Grey
RAL 7016 Anthracite Grey
RAL 7021 Black Grey
RAL 9010 Pure White

Maintenance

Rockpanel Structure can be cleaned with, using a mild detergent diluted in warm water. Do not use solvents on the panels.

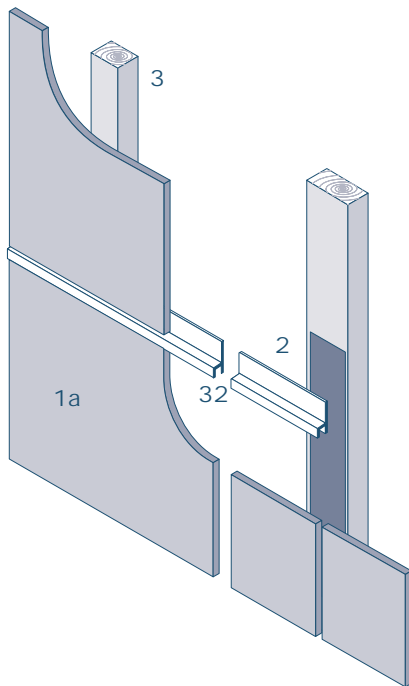
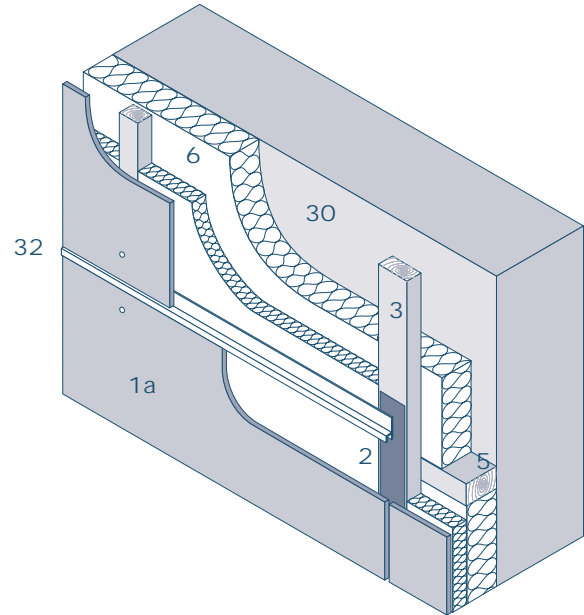
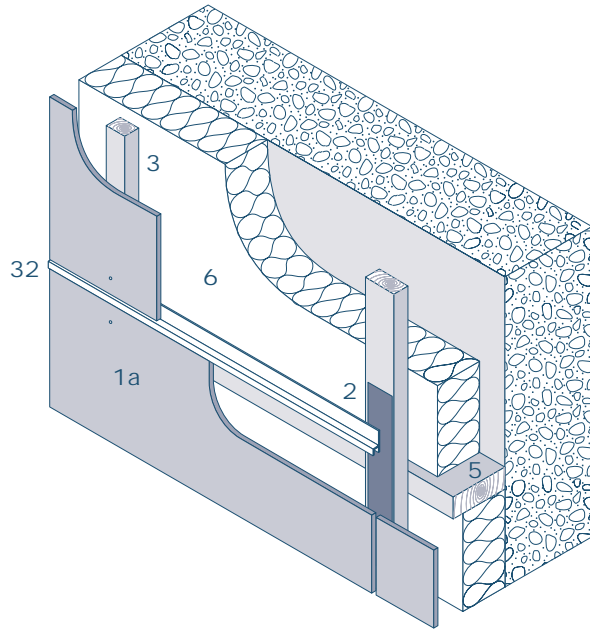
Suppliers

All Rockpanel distributors.

All accessories such as screws, nails, adhesive, joining strip, profiles etc can be ordered via the Rockpanel distributors. Edge paints via Plastestrip Profiles (tel: 0172674771).

Distribution

Rockpanel Structure can be obtained from all Rockpanel distributors in the UK.



- 1a Rockpanel 6 or 8 mm thick
- 2 Joint gasket
- 3 Battens
- 5 Wooden construction
- 6 Rockwool insulation
- 30 Vapour barrier, PE-foil, at least, 0,15 mm thick
- 32 Aluminium chair section profile

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